

**IN THE CLAIMS:**

Claims 1-14 (withdrawn)

Claims 15-31 (cancelled)

Claims 32-45 (withdrawn)

Kindly add the following new claims:

46. (New) A composite microarray slide, useful for carrying a microarray of biological polymers comprising:

a substantially non-reflective phase inversion microporous membrane support having both a membrane polymer and a plurality of opaque solids intimately bound to, and/or partially/completely contained within the polymer of the phase inversion membrane support such that the phase inversion microporous membrane support provides little fluorescence from about three hundred (300) nm to about seven hundred (700) nm;

a non-porous substrate; and

a surface treatment, operatively positioned between the substantially non-reflective phase inversion microporous membrane support and the non-porous substrate, for sufficiently covalently bonding the non-porous substrate to the substantially non-reflective phase inversion microporous membrane;

47. (New) The composite microarray slide of claim 46 wherein, the surface treatment comprises:

+ treated with  
a 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

48. (New) The composite microarray slide of claim 46 wherein, the surface treatment comprises:

+ treated with  
(10-carbomethoxydecyl) dimethylchlorosilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

49. (New) The composite microarray slide of claim 46 wherein, the surface treatment comprises:

+ treated with  
3-glycidoxypropyltrimethoxysilane.

50. (New) The composite microarray slide of claim 46 wherein, the surface treatment comprises:

+ treated with  
N-(2-aminoethyl)-3-aminopropyltrimethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

- 5 51. (New) The composite microarray slide of claim 46 wherein, the non-porous substrate ~~is~~ <sup>comprises a material consisting of</sup> selected from the group comprising:

glass, Mylar, ceramic, acrylic, polypropylene, polycarbonate, polysulfone, polyamide and polyaramid.

52. (New) The composite microarray slide of claim 46 wherein, the non-porous substrate comprises:

glass.

53. (New) The composite microarray slide of claim 46 wherein, the non-porous substrate comprises:

a polyester.

54. (New) The composite microarray slide of claim 46 wherein the, the non-porous substrate comprises:

Mylar.

55. (New) The composite microarray slide of claim 46 wherein the substantially non-reflective phase inversion microporous membrane support ~~is~~ <sup>comprises a material</sup> selected from the group consisting of:

- 5 Nylon 66, Nylon 46, Nylon 6, polysulfone, polyethersulfone, polyvinylidenedifluoride (PVDF).

56. (New) The composite microarray slide of claim 46 wherein the substantially non-reflective phase inversion microporous membrane support comprises:

polyamides.

57. (New) The composite microarray slide of claim 46 wherein the opaque solids comprise:

pigments.

58. (New) The composite microarray slide of claim 46 wherein the opaque solids comprise:

carbon particles.

59. (New) The composite microarray slide of claim 46 wherein the substantially non-reflective phase inversion microporous membrane support has been charge-modified.

60. (New) The composite microarray slide of claim 58 wherein the carbon particles are less than five microns in size.

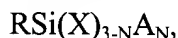
61. (New) The composite microarray slide of claim 58 wherein the carbon particles are substantially uniformly distributed throughout the substantially non-reflective phase inversion microporous membrane support.

62. (New) The composite microarray slide of claim 58 wherein the carbon particles are <sup>constituted</sup> substantially wholly incorporated into the substantially non-reflective phase inversion microporous membrane support.

63. (New) The composite microarray slide of claim 46 wherein the substantially non-reflective phase inversion microporous/membrane support has been charge-modified.

64. (New) The composite microarray slide of claim 46 wherein the surface treatment comprises:

*Q2*  
<sup>treated with</sup>  
an organosilane having the formula:



5 where X is an ethoxy, methoxy, or chloride group, and R is a functional group that interacts with nylon, or with an intermediate substance capable of bonding to nylon <sup>and A</sup> wherein the 'A' group is an additional unreactive group that may or may not be present (depending on whether N is 0, 1, or 2).

65. (New) The composite microarray slide of claim 46 wherein, the surface treatment comprises:

<sup>treated with</sup>  
2-(3,4-epoxycyclohexyl)-ethyltrimethoxysilane.

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